

**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii
December 9, 2011**

180-Day Exp. Date: December 24, 2011

**Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii**

REGARDING: Conservation District Use Application (CDUA) MO-3597 for
Mesic Native Forest Restoration and Fencing

**APPLICANT/
LANDOWNER:** Dunbar Ranch Partners

LOCATION: Kainalu Ranch, Puniuohua/Kainalu, Molokai

**TMKs/
AREA:** (2) 5-7-003:053 and portion of (2) 5-7-005:022
614 Acres

USE: ≈ (approximately) 15 acres

SUBZONE: Resource

DESCRIPTION OF AREA AND CURRENT USE (Exhibits A, B, C & D)

The subject area exists on the eastern end of Molokai at the ≈1,300-1,800-ft elevation. Historically the land was used for agriculture, cattle and forest conservation. The property has generally been preserved for its watershed values, however the presence of non-native ungulates, pigs, deer and goats have altered native forest compositions and increased soil erosion.

The project area is primarily characterized as mesic forest type with variations due to topography; there are small areas of dryland forests found through the ranch. The gentle slopes of the upper elevations receive steady rain and the streams consistently have water. Both Kahawaiiki streams and the Welo tributary of Kainalu have significant numbers of native plant species on the valley floor and on the side of the gulches.

The project area was originally developed as a pasture in the 1930's and remains so today. A non-paved road leads up to this pasture and is maintained from time to time to minimize erosion impacts. The pasture areas are used by the migratory Kolea and endangered Nene. Recently the threatened Newell Shearwater and the Hawaiian Hoary bat have been sighted near the vicinity. Non-native mammals that may be found within the project area include pigs, Axis deer, cows, rats, and mongoose.

Native plant species lama, papala kepau, iliahi aloe, ahakea lau nui, and native hibiscus have been found in the proposed project area. There are mono-typic stands of invasive plants such as Koster's curse and strawberry guava in addition to Formosan koa, ironwood and Christmas berry.

According to the applicant, the ranch was acquired by the applicant's family in the 1940's and used for cattle ranching. In the late 1970's, all of the cattle were sold and in the 1980's, the applicant began improving fences and restoring the ranch for conservation purposes. Since then the primary focus of the ranch has been small agriculture operations and restoration projects. Flowers, avocado, citrus, kou, and out planting of koa, koai'a and forest stewardship are now the focus of the ranch.

There are no modern utilities, only roads, pastures and water troughs. Two sumps occur on the parcel along a waterline; however they will not be utilized or impacted by the project. A single 24' x 24' cabin is located on the east slope of Kainalu Stream in the Agricultural District. Access to the project area is via a 4-wheel drive roads maintained by the Dunbar Partners off of Kamehameha V Highway. Due to natural conditions, it is not always accessible.

There are no known traditional or customary practices exercised in the project area. There are no documented archaeological sites in the project area. The project area may be used for gathering of cultural materials and hunting as authorized by the landowner for management purposes.

PROPOSED USE (See Exhibit A)

Fenceline

The project seeks to improve the watershed canopy and protect native habitat from browsing non-native animals through strategic fencing that will border the upper reaches of two upland streams, Welo and Kahawaiiki stream gulches to stop animal traffic in the streams. The fence line will keep feral and domestic animals away from sensitive areas. The fence will run parallel to the Welo and Kahawaiiki Streams. No access roads will be constructed; the area is accessible via non-paved roads and pastures.

The scope of the fence line is about 2.0 miles and will be constructed to confine cattle and feral animals within the pasture and to restrict movement into the riparian areas. Woven-wire hog proof fence (H1 Tensil wire) with a fence skirt connecting to the ground and Kiawe posts will be utilized. No barbed wiring will be used in the fence to reduce the potential negative impacts of bird or bat harm. A ten foot-wide area for the fence line will be cleared using hand tools. The fence will be 7-feet in height with the upper three feet necessary for deer-proofing the fence. To increase the visibility of the fencing, one-inch marking tape will be woven into the top of the fence to increase visibility to avifauna.

A backhoe may be used to tighten the fencing. Machinery will only be used weather permitting, on even ground and in open pasture areas. Four-wheeled drive vehicles will be the primary mode of delivering all fencing materials to the project areas. Machinery use will be kept to a minimum and remain on roadways to reduce potential soil erosion. Upon installation, the fence line will be inspected and monitored for faulty/weak areas and repaired if found.

Invasive Species Removal

All nonnative, invasive plants will be removed from the fence line and adjacent protected areas. In heavily infested areas, small hand held equipment or tools such as chainsaws and machetes, will be used to clear invasive plants. All chemical applications will be kept to a minimum and will only be prescribed in the most heavily invasive mono-crop areas and applied by certified personnel. Approximately fifteen acres of land will be cleared of nonnative, invasive plant

species. To minimize impacts to the endangered Hawaiian bat, woody plants greater than 15-feet tall shall not be removed or trimmed from May through the end of August.

Common native plants will be planted within the protected area to begin restoration of suitable native habitat for more rare native species. As the site becomes more suitable, rare native species will be planted in the protected areas such as kokio, oha, lama, sandalwood, alani, haha, loulu and alula.

SUMMARY OF COMMENTS

The application was referred to the following agencies for their review and comment-the State: Department of Land and Natural Resources Divisions of: Aquatic Resources, Commission of Water Resource Management, Conservation & Resource Enforcement, Engineering, Forestry & Wildlife, Maui District Land Office and Historic Preservation; the Department of Health, the Office of Hawaiian Affairs, the Office of Environmental Quality Control; the County of Maui Planning Department; and the Molokai Planning Commission. In addition, the CDUA was also sent to the nearest public library the Molokai State Library to make this information readily available to those who may wish to review it.

Comments were received by the following agencies and summarized by Staff as follows:

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

Division of Aquatic Resources (DAR)

We support the restoration and fencing project proposed by the Dunbar Ranch Partners. This project should improve water that flows into Kahawaiiki and Kainalu streams.

Division of Conservation and Resource Enforcement (DOCARE)

No comments

Engineering Division (ENG)

According to the Flood Insurance Rate Map (FIRM) the subject area lies in Zone X. The National Flood Insurance Program Does not have any regulations for developments within Zone X.

Maui District Land Office

No comments

OFFICE OF HAWAIIAN AFFAIRS

OHA has no objections to the anticipated "finding of no significant impact" determination to the EA. We look forward to seeing a CDUP issued and the project completed. We applaud the

applicant and all others involved in this project for their efforts to restore native plant species and improve watershed quality.

ANALYSIS

After reviewing the application, by correspondence dated July 8, 2011, the Department has found that:

1. The proposed project is an identified land use within the Conservation District, pursuant to Hawaii Administrative Rules (HAR), Chapter 13-5, Section 13-5-23, identified land uses in the Limited subzone, LANDSCAPING AND REMOVAL OF NOXIOUS PLANTS, D-1, "removal of noxious plants for maintenance purposes in an area of more than ten thousand square feet that results in significant ground disturbance (e.g. clearing or grubbing);" please be advised, however, that this finding does not constitute approval of the proposal;
2. Pursuant to Section 13-5-40(a), HAR, a public hearing will not be required; and
3. In conformance with Chapter 343, (HRS), as amended, and Chapter 11-200, HAR, a finding of no significant impact (FONSI) to the environment is anticipated for the proposed project.

Notice of this CDUA and draft Environmental Assessment (EA) was published in the July 23, 2011 Environmental Notice. A Finding of No Significant Impact was published in the October 8, 2011 Environmental Notice.

The subject area does not appear to be in the Special Management Area.

CONSERVATION CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30, HAR.

1. *The proposed land use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The project's objective is to protect the watershed and native forest restoration. Staff believes the proposed land use is consistent with the purpose of the Conservation District.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.*

The objective of the Resource subzone is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas. Staff believes that the proposal shall enhance the watershed and improve habitat for native flora and fauna.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management," where applicable.*

The subject area does not lie within the Special Management Area. Staff believes the proposal complies with provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management."

4. *The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.*

Staff believes the proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community or region.

5. *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

Staff believes the applicant shall take adequate measures to insure compatibility with the locality and surrounding area. Fencing is a proven method of restricting ungulates. The strategic location of the fence will allow for the regeneration of native flora within the fenced area.

6. *The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.*

The land will be improved with the removal of undesirable plant growth and noxious weeds. With the fence, native flora has the opportunity to regenerate and the increased vegetation will improve the watershed, enhance native habitats and reduce erosion.

7. *Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.*

There will be no subdivision of land for this proposed project.

8. *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The implementation of the proposed land use shall adhere to public health regulations, utilize best management practices for erosion, sediment control and fire prevention.

DISCUSSION

The applicant seeks to restore native vegetation by constructing a strategically placed fence line to deter ungulates from the watershed area. The project will protect the watershed from non-native animal browsing and trampling.

The project will also remove invasive plants and animals. Plantings of native species will be used to create greater tree canopy and native ground cover that would help to reduce erosion and recreate a suitable environment for reestablishing rare native species. The project is to protect sensitive riparian areas and native species habitat that include several federally listed at risk species.

No woody plants greater than 15-feet shall be removed or trimmed from May through the end of August and no barbwire fences shall be constructed. In addition, one-inch marking tape will be woven into the top of the fence to increase visibility to avifauna and bats and to protect them from potential harm due to the fence.

No archeological and/or historical resources will be adversely affected by the proposed project. There are no known traditional or customary Hawaiian rights known to be exercised in the proposed project area. Hunting and gathering with the landowner's permission will not be affected by the proposal.

RECOMMENDATION:

Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources APPROVE this application for Mesic Native Forest Restoration and Fencing located at Kainalu Ranch, Puniuohua/Kainalu, Molokai, TMKs (2) 5-7-003:053 and portion of (2) 5-7-005:022 subject to the following conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, regulations, and conditions of the Federal, State, and County governments, and applicable parts of the Hawaii Administrative Rules, Chapter 13-5;
2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;
4. The applicant shall comply with all applicable Department of Health administrative rules. Particular attention should be paid to Hawaii Administrative Rules (HAR) Section 11-60.1-33, "Fugitive Dust" and to Chapter 11-46, "Community Noise Control" if applicable;
5. Before proceeding with any work authorized by the Board, the applicant shall submit four (4) copies of the construction to the Chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three (3) of the copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
6. Any work done or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with approved construction plans and, unless otherwise authorized, shall be completed within three (3) years of the approval. The


- applicant shall notify the Department in writing when the project is initiated and when it is completed;
7. All representations relative to mitigation set forth in the accepted environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;
 8. The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;
 9. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
 10. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take the measures to minimize or eliminate the interference, nuisance, harm, or hazard;
 11. Regarding the fence line, no barbwire shall be utilized and the top of the fence shall be marked to increase visibility to flying avifauna and mammals;
 12. No woody plants greater than 15-feet shall be removed or trimmed from May through the end of August;
 13. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact HPD (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;
 13. Other terms and conditions as may be prescribed by the Chairperson; and
 14. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,



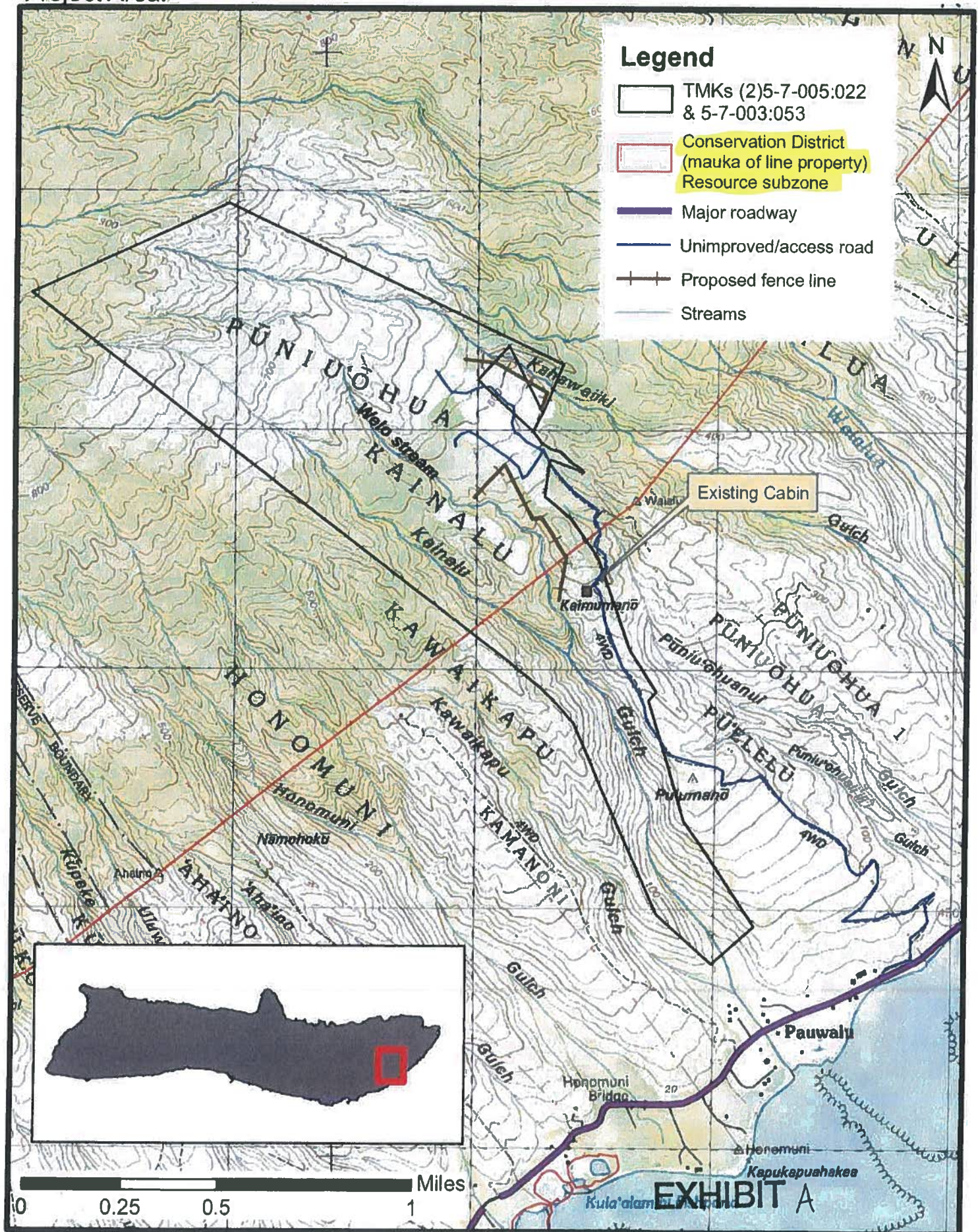
K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:

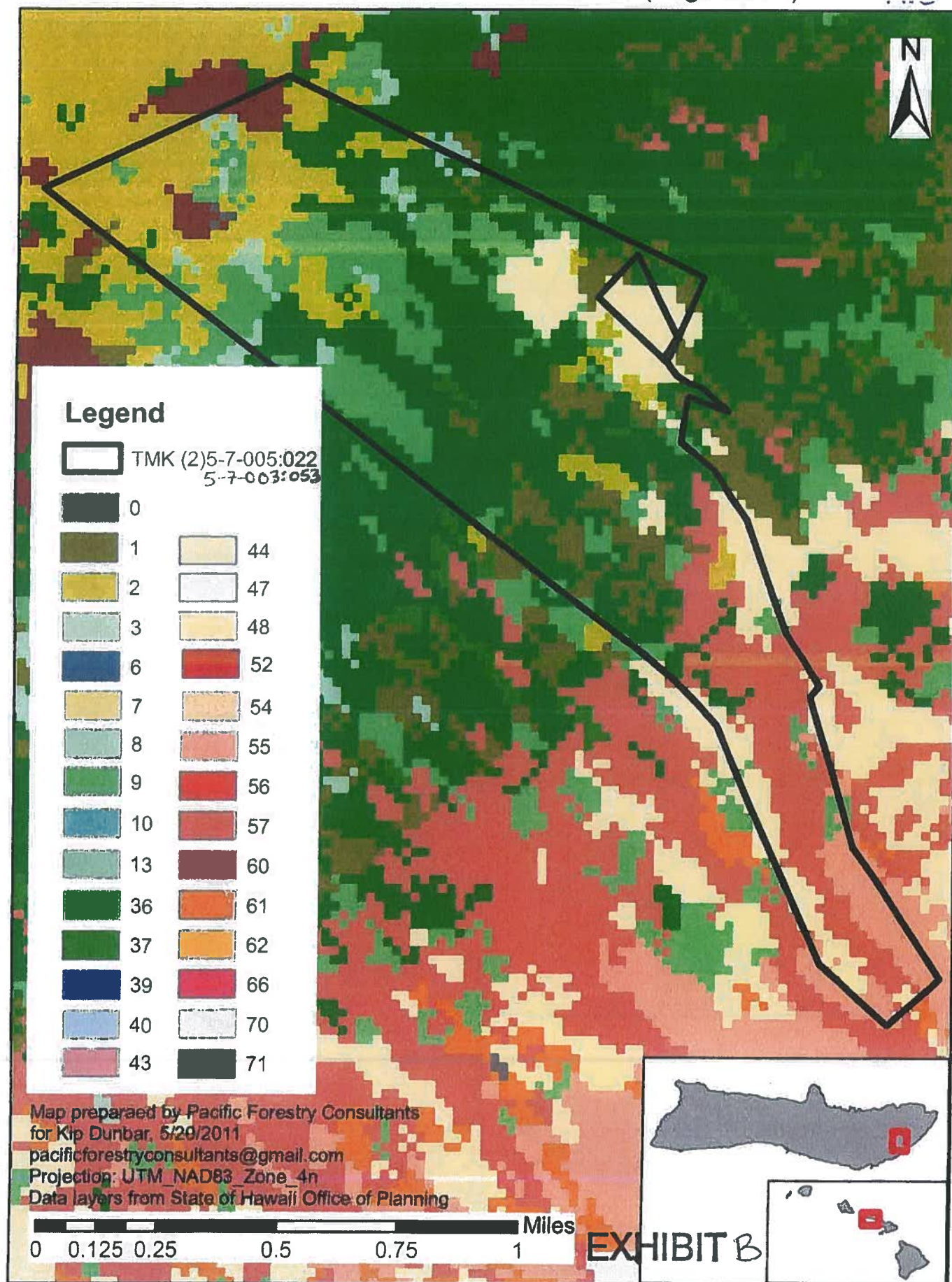


William J. Aila, Jr., Chairperson
Board of Land and Natural Resources

Kainalu Mesic Forest Restoration Project - Existing Infrastructure, Topography, and Project Area.



Kainalu Mesic Forest Restoration - Resources (vegetation)



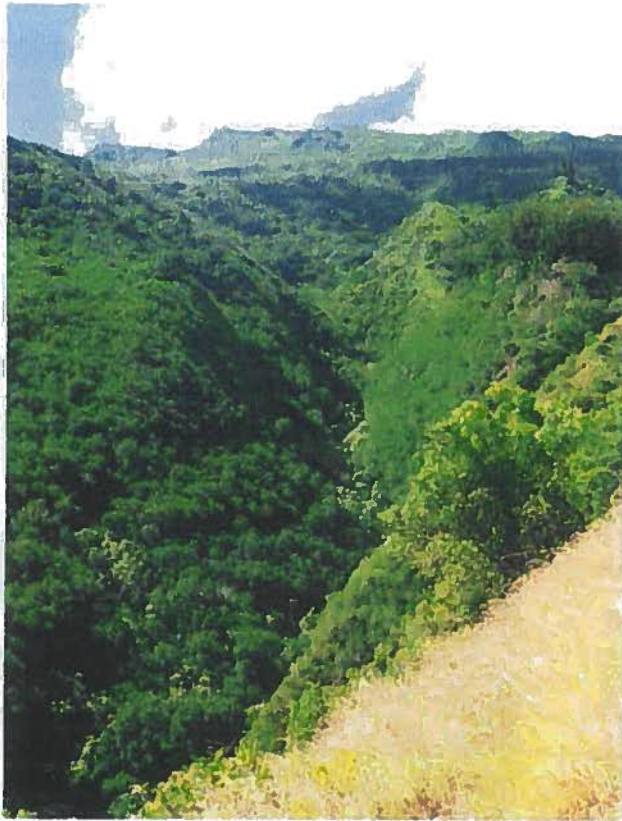
HI-GAP

- | | |
|----|--|
| 1 | Mixed Native-Alien Forest |
| 2 | Mixed Native-Alien Shrubs and Grasses |
| 3 | Native Coastal Vegetation |
| 6 | Bog Vegetation |
| 7 | Native Dry Cliff Vegetation |
| 8 | Native Shrubland (alien grasses) |
| 9 | Native Shrubland / Sparse Ohia (native shrubs) |
| 10 | Native Wet Cliff Vegetation |
| 13 | Closed Hala Forest |
| 36 | Open Ohia Forest (native shrubs) |
| 37 | Open Ohia Forest (uluhe) |
| 39 | Water |
| 40 | Wetland Grasses and Sedges |
| 43 | Active Agriculture |
| 44 | Alien Shrubs and Grasses |
| 47 | Low Intensity Developed |
| 48 | Alien Grassland |
| 52 | Christmas Berry Shrubland |
| 54 | Koa Haole Shrubland |
| 55 | Lantana Shrubland |
| 57 | Alien Forest |
| 60 | Closed Strawberry Guava Forest |
| 61 | Kiawe Forest and Shrubland |
| 62 | Kiawe-Koa Haole Forest and Shrubland |
| 66 | Uncharacterized Forest |
| 70 | Uncharacterized Shrubland |
| 71 | Very Sparse Vegetation to Unvegetated |

The Molokai land cover layer was developed by the Hawaii Gap Analysis Program (HI-GAP) to serve as a key input in the production of avian habitat range maps and to identify "gaps" in current biodiversity conservation efforts, as mandated by the National Gap Analysis Program.

EXHIBIT B₁

Kainalu Mesic Forest Restoration—Riparian gulch areas



Kainalu Mesic Forest Restoration—Ungulate damage near stream area



EXHIBIT C

Kainalu Mesic Forest Restoration—Pasture area, staging area for fence construction



EXHIBIT D